

## المحتوى العلمي المقرر:

- *Quantum mechanics Postulates*
  - *Hermitian operators*
  - *Normalization and orthogonality*
  - *The particle in a box*
  - *The Harmonic oscillator*
  - *The rigid rotator*
  - *Hydrogen atom*
- *The approximation method*
  - *Variation method*
  - *Perturbation method*

## الكتب الأساسية:

Quantum Chemistry, MnQuarrie & Donald, 1997.

## المرجع المساند:

Physical Chemistry, J. De Paula & P. Atkins, 7<sup>th</sup> ed., 2001, W. H. Freeman.